



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

BLUE RIDGE REGIONAL OFFICE

901 Russell Drive, Salem, Virginia 24153

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www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

Robert J. Weld
Regional Director

November 21, 2019

Mr. Tad Barrett
General Manager
Norcraft Companies, LLC
1 Millrace Drive
Lynchburg, Virginia 24502

Location: City of Lynchburg
Registration No.: 30845

Dear Mr. Barrett:

Attached is a renewal Title V permit to operate your facility pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit will be in effect beginning November 21, 2019.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on September 14, 2019 and solicited written public comments by placing a newspaper advertisement in the *Lynchburg News & Advance* on October 17, 2019. The thirty-day required comment period, provided for in 9VAC5-80-270, expired on November 18, 2019.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

To review any federal rules referenced in the attached permit, the US Government Publishing Office maintains text of these rules at www.cfr.gov, Title 40 Parts 60 and 63.

This permit approval to operate shall not relieve Norcraft Companies, LLC of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

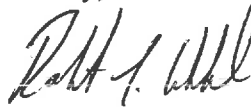
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the permit writer, Rick Wilson at 540-562-6719 or rick.wilson@deq.virginia.gov.

Sincerely,



Robert J. Weld
Regional Director

Attachment: Permit BRRO-30845

cc:

Riley Burger, EPA Region III (burger.riley@epa.gov)

Jonathan Michel, Norcraft (Jonathan.Michel@ncfthq.com)

Susan Tripp, DEQ Office of Air Permit Programs (OAPP) (susan.tripp@deq.virginia.gov)

Christina Clark, DEQ BRRO Air Compliance Inspector (electronic)



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Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: **Norcraft Companies, LLC**
Facility Name: **Norcraft Companies, LLC**
Facility Location: **1 Millrace Drive, Lynchburg, Virginia**
Registration Number: **30845**
Permit Number: **BRRO-30845**

This permit includes the following programs:
Federally Enforceable Requirements - Clean Air Act

November 21, 2019
Effective Date

November 20, 2024
Expiration Date


Robert J. Weld, Regional Director

November 21, 2019
Signature Date

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Facility Information

Permittee

Norcraft Companies, LLC
1 Millrace Drive
Lynchburg, VA 24502

Responsible Official

Tad Barrett
General Manager

Facility

Norcraft Companies, LLC
1 Millrace Drive
Lynchburg, VA 24502

Contact Person

Jonathan Michel
Environmental, Health & Safety Manager
434-385-7500 x6642

County-Plant Identification Number: 51-680-00153

Facility Description: NAICS 337110 Wood Kitchen Cabinet and Countertop Manufacturing – Norcraft Companies, LLC is a kitchen and bath wood cabinet manufacturing facility. Cabinet components are received by the source from suppliers. Minimal woodworking, consisting of routing, cutting, and sanding, is required prior to the finishing process.

Emission Units

Process Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
W1	BH1, BH2 & BH3	Assorted wood working equipment	various	Fabric filter	BH1, BH2 & BH3	PM, PM-10, PM2.5	6/18/2018
F1	-	Finishing line consisting of the spray booths O-1 through O-12 as follows:	150 cabinets/hr	-	-	-	6/18/2018
O-1 (formerly B1)	O-1	Primer/Toner - Backs spray booth	-	Dry filter	O-1	PM, PM-10, PM2.5	6/18/2018
O-2 (formerly B5)	O-2	Primer/Toner - Faces spray booth	-	Dry filter	O-2	PM, PM-10, PM2.5	6/18/2018
O-3 (formerly B8)	O-3	Stain - Backs spray booth	-	Dry filter	O-3	PM, PM-10, PM2.5	6/18/2018
O-4 (formerly B7)	O-4	Stain - Faces spray booth	-	Dry filter	O-4	PM, PM-10, PM2.5	6/18/2018
O-5 (formerly B10)	O-5	Sealer and 2nd Primer -Backs spray booth	-	Dry filter	O-5	PM, PM-10, PM2.5	6/18/2018
O-6 (formerly B9)	O-6	Sealer and 2nd Primer - Faces spray booth	-	Dry filter	O-6	PM, PM-10, PM2.5	6/18/2018
O-7 (formerly B11)	O-7	Topcoat and Enamel - Backs spray booth	-	Dry filter	O-7	PM, PM-10, PM2.5	6/18/2018
O-8 (formerly OB5)	O-8	Topcoat and Enamel - Faces spray booth	-	Dry filter	O-8	PM, PM-10, PM2.5	6/18/2018
O-9 (formerly B12)	O-9	Glaze Booth	-	Dry filter	O-9	PM, PM-10, PM2.5	6/18/2018
O-10 (formerly B13)	O-10	Glaze Topcoat Booth	-	Dry filter	O-10	PM, PM-	6/18/2018

						10, PM2.5	
O-11 (formerly B3)	O-11	Toner/Stain/Primer spray booth [offline]	-	Dry filter	O-11	PM, PM-10, PM2.5	6/18/2018
O-12 (formerly B4)	O-12	Topcoat/Primer spray booth [offline]	-	Dry filter	O-12	PM, PM-10, PM2.5	6/18/2018
F2	-	Finishing line consisting of the spray booths N-1 to N-13 as follows:	150 cabinets/hr	-	-	-	-
N-1	N-1	Primer/Toner - Backs spray booth	-	Dry filter	N-1	PM, PM-10, PM2.5	6/18/2018
N-2	N-2	Primer/Toner - Faces spray booth	-	Dry filter	N-2	PM, PM-10, PM2.5	6/18/2018
N-3	N-3	Stain - Backs spray booth	-	Dry filter	N-3	PM, PM-10, PM2.5	6/18/2018
N-4	N-4	Stain - Faces spray booth	-	Dry filter	N-4	PM, PM-10, PM2.5	6/18/2018
N-5	N-5	Sealer and 2nd Primer -Backs spray booth	-	Dry filter	N-5	PM, PM-10, PM2.5	6/18/2018
N-6	N-6	Sealer and 2nd Primer - Faces spray booth	-	Dry filter	N-6	PM, PM-10, PM2.5	6/18/2018
N-7	N-7	Topcoat and Enamel - Backs spray booth	-	Dry filter	N-7	PM, PM-10, PM2.5	6/18/2018
N-8	N-8	Topcoat and Enamel - Faces spray booth	-	Dry filter	N-8	PM, PM-10, PM2.5	6/18/2018
N-9	N-9	Primer spray booth [offline]	-	Dry filter	N-9	PM, PM-10, PM2.5	6/18/2018
N-10	N-10	Stain spray booth [offline]	-	Dry filter	N-10	PM, PM-10, PM2.5	6/18/2018
N-11	N-11	Sealer and 2nd Primer spray	-	Dry filter	N-11	PM, PM-	6/18/2018

		booth [offline]				10, PM2.5	
N-12	N-12	Topcoat and Enamel spray booth [offline]	-	Dry filter	N-12	PM, PM-10, PM2.5	6/18/2018
N-13	N-13	Molding Topcoat spray booth [offline]	-	Dry filter	N-13	PM, PM-10, PM2.5	6/18/2018
EG1	EG-1	Natural gas-fired Generac SI Emergency Generator	64kW (110 HP)	-	-	-	6/18/2018

*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

Fuel Burning Equipment Requirements – (EG1)

Limitations

1. **Fuel Burning Equipment Requirements - Limitations** - Visible emissions from the emergency engine (EG1) stacks shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
(9VAC5-80-110 and 9VAC5-50-80)
2. **Fuel Burning Equipment Requirements - Limitations** - The emergency engine-generator set (EG1) shall not operate more than 500 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 12 of the 6/18/18 Permit Document)

Monitoring

3. **Fuel Burning Equipment Requirements - Monitoring** - If the presence of visible emissions is observed from the emergency engine stack (EG1), the permittee shall take timely corrective action such that the engine resumes operation with no visible emissions.
(9VAC5-50-20 and 9VAC5-80-110 E & K)

Recordkeeping

4. **Fuel Burning Equipment Requirements - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. These records shall include, but are not limited to:
 - a. Annual hours of operation, calculated monthly as the sum of each consecutive 12-month period.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9VAC5-80-110 E & K)

MACT Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engine Requirements – (EG1)

General Compliance Requirements

5. **MACT Subpart ZZZZ - General Compliance Requirements** - For the emergency engine (EG1), the permittee shall comply with 40 CFR 63 Subpart ZZZZ by complying with the applicable requirements of 40 CFR 60 Subpart JJJJ. No other requirements of this subpart apply.
(9VAC5-80-110 and 40 CFR 63.6590(c))

NSPS Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – (EG1)

General Compliance Requirements

6. **NSPS Subpart JJJJ - General Compliance Requirements** - The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A as listed in 40 CFR 60 Subpart JJJJ Table 3.
(9VAC5-80-110 and 40 CFR 60.4246)

Limitations

7. **NSPS Subpart JJJJ Requirements - Limitations** - The emergency engine (EG1) shall comply with the emission limitations of 40 CFR 60 Subpart JJJJ Table 1 for the entire life of the engine.
(9VAC5-80-110, 40 CFR 60.4233(e), and 40 CFR 60.4234)
8. **NSPS Subpart JJJJ Requirements - Limitations** - The permittee shall comply with Condition 7 in accordance with 40 CFR 60.4243(b)(1) and (d). Operation for non-emergency purposes, other than that allowed under 40 CFR 60.4243(d), may require a permit to modify and operate pursuant to 9VAC5-80 Article 6.
(9VAC5-80-110 and 40 CFR 60.4243)

Monitoring

9. **NSPS Subpart JJJJ Requirements - Monitoring** - The emergency engines (EG1) shall be installed with a non-resettable hour meter.
(9VAC5-80-110 and 40 CFR 60.4237(c))

Recordkeeping & Reporting

10. **NSPS Subpart JJJJ Requirements – Recordkeeping & Reporting** - The permittee shall maintain records and submit reports as required in 40 CFR 60.4245(a), (b), and (e). (9VAC5-80-110 and 40 CFR 60.4245)

Process Equipment Requirements - Woodworking (W1)

Limitations

11. **Woodworking Equipment Requirements - Limitations** - Particulate emissions from the dust collection systems (BH-1, BH-2, BH-3) shall be controlled by fabric filters. The fabric filters shall be provided with adequate access for inspection and shall be in operation when the dust collection systems are operating.
(9VAC5-80-110 and Condition 6 of the 6/18/18 Permit Document)
12. **Woodworking Equipment Requirements - Limitations** - Fugitive particulate emissions from the collection, transfer and handling of wood waste shall be controlled by rotary air lock from the collector to an enclosed bin.
(9VAC5-80-110 and Condition 7 of the 6/18/18 Permit Document)
13. **Woodworking Equipment Requirements - Limitations** - Emissions from the operation of each of the wood dust collection systems BH-1 and BH-2 shall not exceed the limits specified below:

Pollutant	Limit	Unit of Measure
Particulate Matter (PM)	0.01	gr/dscf
PM-10	0.01	gr/dscf

(9VAC5-80-110 and Condition 15 of the 6/18/18 Permit Document)

14. **Woodworking Equipment Requirements - Limitations** - Emissions from the operation of the wood dust collection system BH-3 shall not exceed the limits specified below:

Pollutant	Limit	Unit of Measure
Particulate Matter (PM)	0.01	gr/dscf
PM-10	0.01	gr/dscf
PM 2.5	0.01	gr/dscf

(9VAC5-80-110 and Condition 16 of the 6/18/18 Permit Document)

15. **Woodworking Equipment Requirements - Limitations** - Visible emissions from each wood dust system exhaust shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110 and Condition 19 of the 6/18/18 Permit Document)
16. **Woodworking Equipment Requirements - Limitations** - Visible emissions from any fugitive emission points shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 20 of the 6/18/18 Permit Document)

Monitoring

17. **Woodworking Equipment Requirements - Monitoring** - Each fabric filter for dust collection systems (BH-1, BH-2, BH-3) shall be equipped with devices to continuously measure the differential pressure drop across the fabric filter. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective fabric filter is operating. The permittee shall establish a normal operating range for the differential pressure drop across each of the baghouses, based on manufacturer's recommendations or developed from observations recorded from the monitoring devices during normal operation. The permittee shall maintain written documentation of this range. The devices used to continuously measure differential pressure shall be observed by the permittee with a frequency of not less than once per work shift that the dust collection systems (BH-1, BH-2 or BH-3) are operational. The permittee shall keep a log of the observations from the differential pressure devices. Upon detecting an observation outside the normal operating range for the differential pressure drop across any of the baghouses, the permittee shall restore operation of the baghouse to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
(9VAC5-80-110 E & K and Condition 11 of the 6/18/18 Permit Document)
18. **Woodworking Equipment Requirements - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the fabric filter control devices BH1, BH2, and BH3 controlling the CAM-affected unit (W1) in accordance with the CAM Plan in Attachment A of this permit.

Changes pertaining to the information in this condition shall not be implemented prior to approval by the DEQ. Changes may require public participation according to the requirements of 9VAC5-80-230.
(9VAC5-80-110 and 40 CFR 64.6 (c))

19. **Woodworking Equipment Requirements - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9VAC5-80-110 and 40 CFR 64.6 (c))
20. **Woodworking Equipment Requirements - Monitoring - Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9VAC5-80-110 and 40 CFR 64.7 (b))
21. **Woodworking Equipment Requirements - Monitoring - Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the assorted woodworking equipment (W1) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9VAC5-80-110 and 40 CFR 64.7 (c))
22. **Woodworking Equipment Requirements - Monitoring - Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the assorted woodworking equipment (W1), including the control devices BH1, BH2 and BH3 to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9VAC5-80-110 and 40 CFR 64.7 (d)(1))
23. **Woodworking Equipment Requirements - Monitoring - Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but

is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9VAC5-80-110 and 40 CFR 64.7(d)(2))

24. **Woodworking Equipment Requirements - Monitoring - Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9VAC5-80-110 and 40 CFR 64.7(e))
25. **Woodworking Equipment Requirements - Monitoring - Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 excursions for W1 for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
- a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.
- (9VAC5-80-110 and 40 CFR 64.8(a) and (b))

Recordkeeping

26. **Woodworking Equipment Requirements - Recordkeeping - Compliance Assurance Monitoring (CAM)** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under

40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(9VAC5-80-110 and 40 CFR 64.9(b))

Reporting

27. Woodworking Equipment Requirements - Reporting - Compliance Assurance

Monitoring (CAM) Reporting - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition 62 of this permit to the Blue Ridge Regional Office. Such reports shall include at a minimum:

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9VAC5-80-110 and 40 CFR 64.9(a))

Process Equipment Requirements - Furniture Finishing (Emission Unit ID# F1 and F2)

Limitations

28. **Finishing Equipment Requirements - Limitations** - Particulate emissions from the spray booths of the finishing line F1 shall be controlled by dry filters. The spray booths shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 1 of the 6/18/18 Permit Document)
29. **Finishing Equipment Requirements - Limitations** - Particulate emissions from the spray booths of the finishing line F2 shall be controlled by dry filters. The spray booths shall be provided with adequate access for inspection and shall be in operation when the spray booths are operating.
(9VAC5-80-110 and Condition 3 of the 6/18/18 Permit Document)
30. **Finishing Equipment Requirements - Limitations** - Volatile Organic Compound emissions from the spray booths of the finishing line F1 shall be minimized by proper

spraying technique, use of high solids and/or low VOC coatings whenever possible, and by using application equipment consistent with good work practice standards, which includes HVLP, air assisted airless, and airless application equipment or other equipment as approved by DEQ.

(9VAC5-80-110 and Condition 4 of the 6/18/18 Permit Document)

31. **Finishing Equipment Requirements - Limitations** - Volatile Organic Compound emissions from the spray booths of the finishing line F2 shall be minimized by proper spraying technique, use of high solids and/or low VOC coatings whenever possible, and by using application equipment consistent with good work practice standards, which includes HVLP, air assisted airless, and airless application equipment or other equipment as approved by DEQ.
(9VAC5-80-110 and Condition 5 of the 6/18/18 Permit Document)

32. **Finishing Equipment Requirements - Limitations** - Emissions from the finishing line F1 shall not exceed the limits specified below:

Pollutant	Hourly Limit	Unit of Measure	Annual Limit	Unit of Measure
Particulate Matter (PM)	3.2	lbs/hr	13.2	tons/yr
PM-10	3.2	lbs/hr	13.2	tons/yr
PM 2.5	3.2	lbs/hr	13.2	tons/yr
Volatile Organic Compounds	99.7	lbs/hr	249.0	tons/yr

(9VAC5-80-110 and Condition 13 of the 6/18/18 Permit Document)

33. **Finishing Equipment Requirements - Limitations** - Emissions from the finishing line F2 shall not exceed the limits specified below:

Pollutant	Hourly Limit	Unit of Measure	Annual Limit	Unit of Measure
Particulate Matter (PM)	3.2	lbs/hr	13.2	tons/yr
PM-10	3.2	lbs/hr	13.2	tons/yr
PM 2.5	3.2	lbs/hr	13.2	tons/yr
Volatile Organic Compounds	99.7	lbs/hr	249.0	tons/yr

(9VAC5-80-110 and Condition 14 of the 6/18/18 Permit Document)

34. **Finishing Equipment Requirements - Limitations** - Visible emissions from the finishing line F1 spray booth exhausts shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110 and Condition 17 of the 6/18/18 Permit Document)

35. **Finishing Equipment Requirements - Limitations** - Visible emissions from the finishing line F2 spray booth exhausts shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110 and Condition 18 of the 6/18/18 Permit Document)
36. **Finishing Equipment Requirements - Limitations** - Visible emissions from any fugitive emission points shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9VAC5-80-110 and Condition 20 of the 6/18/18 Permit Document)

Monitoring

37. **Finishing Equipment Requirements - Monitoring** - Each spray booth of the finishing line F1 shall be equipped with devices to continuously measure the differential pressure drop across the dry filters. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective spray booth is operating.
(9VAC5-80-110 and Condition 8 of the 6/18/18 Permit Document)
38. **Finishing Equipment Requirements - Monitoring** - Each spray booth of the finishing line F2 shall be equipped with devices to continuously measure the differential pressure drop across the dry filters. Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective spray booth is operating.
(9VAC5-80-110 and Condition 9 of the 6/18/18 Permit Document)
39. **Finishing Equipment Requirements - Monitoring** - To ensure good performance of the spray booth filters of the finishing line F1, the device used to continuously measure differential pressure shall be observed by the permittee with a frequency of not less than once per week. The permittee shall keep a log of the observations from the differential pressure devices.
(9VAC5-80-110 E & K)
40. **Finishing Equipment Requirements - Monitoring** - To ensure good performance of the spray booth filters of the finishing line F2, the device used to continuously measure differential pressure shall be observed by the permittee with a frequency of not less than once per week. The permittee shall keep a log of the observations from the differential pressure devices.
(9VAC5-80-110 and Condition 10 of the 6/18/18 Permit Document)

41. **Finishing Equipment Requirements - Monitoring** - At least one time each calendar week that the spray booths operate, an observation of the presence of visible emissions from each of the spray booth stacks in finishing lines F1 and F2 shall be made. The presence of visible emissions shall require the permittee to:
- a. take timely corrective action such that the spray booth resumes operation with no visible emissions, or,
 - b. conduct a visible emission evaluation (VEE) on the spray booth stack in accordance with EPA Method 9 (reference 40 CFR 60 Appendix A) for a minimum of six minutes, to assure visible emissions from the affected spray booth are 5 percent opacity or less. If any of the observations exceed the opacity limitation of 5 percent, the observation period shall continue until a total of sixty (60) minutes of observations have been completed. Timely corrective action shall be taken, if necessary, such that the spray booth resumes operation within the 5 percent opacity limit.

The permittee shall maintain a spray booth stack observation log for the spray booths to demonstrate compliance. The log shall include the date and time of the observations, the name of the observer, whether or not there were visible emissions, and any necessary corrective action. If the spray booth has not been operated during the week, it shall be noted in the spray booth log and that a visual observation was not required.
(9VAC5-80-110 E & K)

Recordkeeping

42. **Finishing Equipment Requirements - Recordkeeping** - The permittee shall maintain records for finishing lines F1 and F2 of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
- a. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information showing VOC content, toxic compound or HAP content, water content, and solids content for each coating, adhesive, thinner, and cleaning solution used.
 - b. Monthly and annual throughput (in gallons) of each coating, adhesive, thinner, and cleaning solution used in finishing line F1. Annual throughputs shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- c. Monthly and annual throughput (in gallons) of each coating, adhesive, thinner, and cleaning solution used in finishing line F2. Annual throughputs shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- d. Monthly and annual emissions calculations for finishing line F1 using calculation methods approved by the Blue Ridge Regional Office. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- e. Monthly and annual emissions calculations for finishing line F2 using calculation methods approved by the Blue Ridge Regional Office. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- f. Operation and control device monitoring records for the spray booth filters as required in Conditions 39 and 40.
- g. Scheduled and unscheduled maintenance, and operator training records as required by Maintenance/Operating Procedures Condition 53.
- h. Visible emissions observation logs for the spray booths, as required by Condition 41.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 22 of the 6/18/18 Permit Document)

MACT Subpart JJ – National Emission Standards for Wood Furniture Manufacturing Operations – (F1 and F2)

General Compliance

- 43. **MACT Subpart JJ - General Compliance Requirements** - The facility shall be operated in compliance with Federal requirements under 40 CFR 63 Subpart JJ and 40 CFR 63 Subpart A, as identified in Table 1 for Subpart JJ. All terms used regarding 40 CFR 63, Subpart JJ shall have the meanings as defined in 40 CFR 63.801 and 40 CFR 63.2.
(9VAC5-60-100, 9VAC5-80-110, 40 CFR 63.800 and 40 CFR 63 Subpart A)

Emission Limits

44. **MACT Subpart JJ - Emission Limits - Volatile Hazardous Air Pollutant (VHAP)**
emissions from the facility shall not exceed the following limits:

- a. For finishing operations, use any of the following methods:
 - i. Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP / lb solids for the existing source Finishing Lines F1 and F2, as applied;
 - ii. Use compliant finishing materials that meet specifications as described in Table 3 of 40 CFR 63 Subpart JJ;
 - iii. Use a control device which must operate at an efficiency that is equivalent to no greater than 1.0 lb of VHAP for the existing source Finishing Lines F1 and F2 being emitted per lb of solids used;
 - iv. Use any combination of averaging, compliant finishing materials, and control device(s) such that no greater than 1.0 lb of VHAP for the existing source Finishing Lines F1 and F2 will be emitted per pound of solids used;
- b. For cleaning operations, strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC / lb solids, as applied;
- c. For contact adhesive operations, use either of the following methods;
 - i. Compliant contact adhesives shall be used based on the criteria as described in Table 3 of 40 CFR 63 Subpart JJ;
 - ii. Use a control device which must operate at an efficiency that is equivalent to no greater than 1.0 lb of VHAP for the existing source Finishing Lines F1 and F2 being emitted per pound of solids used.
- d. On or after November 21, 2014, formaldehyde emissions from the facility shall be limited by complying with one of the following options:
 - i. Limit total formaldehyde (F_{total}) use in coatings and contact adhesives to no more than 400 pounds per rolling 12 month period, as applied.
 - ii. Use coatings and contact adhesives only if they are low-formaldehyde coatings and contact adhesives, in any wood furniture manufacturing operations. "Low-

formaldehyde” means a product concentration of less than or equal to 1.0 percent formaldehyde by weight, as described in a certified product data sheet for the material.

(9VAC5-80-110 and 40 CFR 63.802)

45. **MACT Subpart JJ - Emission Limits** - At all times, the owner or operator shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
(9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.802)

Work Practice Standards

46. **MACT Subpart JJ - Work Practice Standards** - The permittee shall develop and implement the following work practice standards:
- a. Work practice implementation plan - The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture operation and addresses each of the work practice standards presented in paragraphs b through l of this condition.
 - i. The implementation plan shall be developed no more than 60 days after the compliance date.
 - ii. The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in §63.803 of Subpart JJ or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
 - b. Operator training course - The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice

implementation plan. The training program shall include, at a minimum, the following:

- i. A list of all current personnel by name and job description that are required to be trained;
 - ii. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
 - iii. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
 - iv. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- c. Inspection and maintenance plan - The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
- i. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
 - ii. An inspection schedule;
 - iii. Methods for documenting the date and results of each inspection and any repairs that were made;
 - iv. The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - (1) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (2) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- d. Cleaning and washoff solvent accounting system - The permittee shall develop an organic HAP solvent accounting form to record:
- i. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of Subpart JJ;

- ii. The number of pieces washed off, and the reason for the washoff; and
 - iii. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- e. Chemical composition of cleaning and washoff solvents - The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of Subpart JJ, in concentrations subject to MSDS reporting as required by OSHA.
- f. Spray booth cleaning - The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- g. Storage requirements - The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- h. Application equipment requirements – As of November 21, 2014, each owner or operator of an affected source shall not use conventional air spray guns except when all emissions from the finishing application station are routed to a functioning control device.
- i. Line cleaning - The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- j. Gun cleaning - The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- k. Washoff operations - The permittee shall control emissions from washoff operations by:
- i. Using normally closed tanks for washoff; and
 - ii. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- l. Formulation assessment plan for finishing operations - The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:

- i. Identifies VHAP from the list presented in Table 5 of Subpart JJ (List of VHAP of Potential Concern Identified by the Industry) that are being used in finishing operations;
- ii. Establishes a baseline level of usage for each VHAP identified in Table 5 of Subpart JJ. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by §63.803 (1)(2). Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the equation in §63.805 (d) or (e).

For VHAPs that do not have a baseline, one will be established according to Condition vi. of this subsection.

- iii. Tracks the annual usage of each VHAP identified in Table 5 of Subpart JJ that is present in amounts subject to MSDS reporting as required by OSHA.
- iv. If the annual usage of the VHAP identified in Table 5 of Subpart JJ exceeds its baseline level, then the permittee of the facility shall provide a written notification to the Blue Ridge Regional Office that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
 - (1) The exceedance is no more than 15.0 percent above the baseline level;
 - (2) Usage of the VHAP is below the de minimis level presented in Table 5 for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in §63.805 (d) or (e);
 - (3) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
 - (4) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC / lb solids, as applied.
- v. If none of the explanations listed in paragraph iv of this condition are the reason for the increase, the permittee shall confer with the Blue Ridge Regional Office to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Blue Ridge Regional Office and the Administrator

and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

- vi. If the facility uses a VHAP of potential concern listed in Table 6 of Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table for that chemical. The permittee shall track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in Table 6 of Subpart JJ for that chemical, then the permittee shall provide an explanation to the Blue Ridge Regional Office that documents the reason for exceedance of the de minimis level. If the explanation is not one of those listed in paragraph iv. of this condition, the affected source shall follow the procedures established in paragraph v. of this condition.

(9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.803(a)-(1))

Continuous Compliance

47. **MACT Subpart JJ - Continuous Compliance** - Continuous compliance with the VHAP emissions limits shall be determined as described. See Conditions 51 and 52 for content and timing of report submissions and signature requirements)

- a. For finishing operations, the permittee shall demonstrate continuous compliance by submitting the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report.
 - i. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0 for the existing source Finishing Lines F1 and F2. The facility is in violation of the standard if E is greater than 1.0 for an existing source for any month.

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + \dots + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + \dots + S_nW_n) / (M_{c1} + M_{c2} + \dots + M_{cn})$$

Equation 1

E = the emission limit achieved by an emission point or a set of emission points, in lb VHAP / lb solids.

M_c = the mass of solids in a finishing material or coating (c) used monthly, including exempt finishing materials and coatings, lb solids/month.

C_c = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids.

S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.

W = the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The Emission Limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month (M_c in lb solids / month) multiplied by the VHAP content in each material (C_c in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month (M_c in lb solids / month).

- ii. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.
- b. For finishing operations using compliant finishing materials (as specified in §63.804(a)(2)(i) – (iii) or §63.804(d)(2)(i)-(iii)), the permittee shall demonstrate continuous compliance by using compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report required by §63.807(c).
- i. The compliance certification shall state that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance.
 - ii. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.
- c. For finishing operations using compliant finishing materials and applying coatings using continuous coaters, the permittee shall demonstrate continuous compliance by meeting either of the following:
- i. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, use compliant thinners, and submit a compliance certification with the semiannual report required by §63.807(c).

- (1) The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance.
 - (2) The facility is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.
- ii. Use compliant coatings, as determined by the VHAP content of the coating in the reservoir, use compliant thinners, maintain a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added. Maintain records of solvent additions and submit a compliance certification with the semiannual report required by §63.807(c).
- (1) The compliance certification shall state that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period.
 - (2) The facility is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit, as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.
- d. For finishing operations using a control system with an overall control efficiency (R) such that the value of E_{ac} in Equation 2 is no longer greater than 1.0 lb VHAB / lb (0.8 lb VHAB/lb for new sources) solid, the permittee shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to manufacturer's specifications. The permittee shall also submit an excess emissions and continuous monitoring system performance report and summary report as required by §63.807(d) and §63.10 (e) of Subpart A.

$$R = [(E_{bc} - E_{ac}) / E_{bc}] (100)$$

Equation 2

The value of E_{bc} in Equation 2 shall be calculated using Equation 1

- i. Where a capture/control device is used, a device to monitor each site-specific operating parameter established in accordance §63.804(f)(6)(i) is required.
 - ii. Where a thermal incinerator is used, a temperature monitoring device equipped with a continuous recorder is required as described in §63.804(g)(4)(ii). For catalytic incinerators equipped with a fluidized catalyst bed, a constant pressure drop must be maintained, measured monthly, across the catalyst bed.
 - iii. Where a carbon adsorber is used, the permittee must adhere to the requirements described in §63.804(g)(4)(iii).
 - iv. The permittee shall not operate the capture or control device at a daily average value greater than or less than (as appropriate) the operating parameter values. The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day.
 - v. If the permittee uses a control device not listed in 63.804(f)(4), they must submit for the Administrator's approval, a description of the device, test data verifying performance, and appropriate site-specific operating parameters that will be monitored to demonstrate continuous compliance with the standard.
- e. For finishing operations any of the following compliance methods may be used: 1) an averaging approach, as in Condition 47a; 2) compliant coatings, as in Conditions 47.b and 47.c; 3) a control system as in Condition 47d; or 4) a combination of these methods.
- f. For contact adhesive operations that use compliant adhesives to show initial compliance, the permittee shall submit a compliance certification with the semiannual report as required by §63.807(c).
- i. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used.
 - ii. Each day a noncompliant contact or foam adhesive is used constitutes a single violation of the standard.
- g. For contact adhesive operations that use a control system with an overall control efficiency (R) such that the G_{ac} value (Equation 3) is no greater than 1.0 for an existing source (0.2 for new sources), the permittee shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to the manufacturer's specifications. The permittee shall also submit the excess emissions and continuous monitoring system performance report and summary required by §63.807(d) and §63.10(e) of Subpart A.

$$R = [(G_{bc} - G_{ac}) / G_{bc}] (100)$$

Equation 3

G = the VHAP content of a contact adhesive, in lb VHAP / lb solids, as applied.

ac = after the control system is installed and operated.

bc = before control.

- i. Where a capture/control device is used, a device to monitor each site-specific operating parameter established in accordance with §63.804(f)(6)(i) is required.
- ii. Where an incinerator is used, a temperature monitoring device equipped with a continuous recorder is required. For catalytic incinerators equipped with a fluidized catalyst bed, a constant pressure drop must be maintained, measured monthly, across the catalyst bed.
- iii. Where a carbon adsorber is used, the permittee must adhere to the requirements described in §63.804(g)(6)(iii).
- iv. The permittee shall not operate the capture or control device at a daily average value greater than or less than (as appropriate) the operating parameter values. The daily average shall be calculated as the average of all values for a monitored parameter recorded during the operating day.
- v. If the permittee uses a control device not listed in 63.804(f)(6), they must submit for the Administrator's approval, a description of the device, test data verifying performance of the device, and appropriate operating parameter values that will be monitored to demonstrate continuous compliance with the standard.
- h. For strippable spray booth coatings the permittee shall submit a compliance certification with the semiannual report as required by §63.807(c). The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used constitutes a single violation of the standard.
- i. For work practice standards the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan specified in Condition 46.a.

j. Formaldehyde Limitations:

- i. Calculate total formaldehyde emissions from all finishing materials and contact adhesives used at the facility using the following equation and maintain a value of F_{total} no more than 400 pounds per rolling 12 month period.

$$F_{total} = (C_{f1}V_{c1} + C_{f2}V_{c2} + \dots + C_{fn}V_{cn} + G_{f1}V_{g1} + G_{f2}V_{g2} + \dots + G_{fn}V_{gn})$$

Equation 5

Where:

F_{total} = total formaldehyde emissions in each rolling 12 month period

C_f = the formaldehyde content of a finishing material (c), in pounds of formaldehyde per gallon of coating (lb / gal)

V_c = the volume of formaldehyde-containing finishing material (c), in gal

G_f = the formaldehyde content of a contact adhesive (g), in pounds of formaldehyde per gallon of contact adhesive (lb / gal)

V_g = the volume of formaldehyde-containing contact adhesive (g), in gal

- ii. Use a control system with an overall control efficiency (R) such that the calculated value of F_{total} in the following equation is no more than 400 pounds per rolling 12 month period.

$$F_{total} = (C_{f1}V_{c1} + C_{f2}V_{c2} + \dots + C_{fn}V_{cn} + G_{f1}V_{g1} + G_{f2}V_{g2} + \dots + G_{fn}V_{gn}) * (1-R)$$

Equation 6

Where:

F_{total} = total formaldehyde emissions in each rolling 12 month period

C_f = the formaldehyde content of a finishing material (c), in pounds of formaldehyde per gallon of coating (lb / gal)

V_c = the volume of formaldehyde-containing finishing material (c), in gal

G_f = the formaldehyde content of a contact adhesive (g), in pounds of formaldehyde per gallon of contact adhesive (lb / gal)

V_g = the volume of formaldehyde-containing contact adhesive (g), in gal

R = the overall efficiency of the control system, expressed as a percentage

- iii. To demonstrate compliance for low-formaldehyde coatings and contact adhesives, the permittee must maintain a certified product data sheet for each coating and contact adhesive used, as required by §63.806(b)(1), and submit a compliance certification with the semiannual report required by §63.807(c).

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.804, and 40 CFR 63.8)

Testing

48. **MACT Subpart JJ - Testing** - If performance testing occurs, the test(s) shall be conducted using the test methods and procedures as specified in 40 CFR 63.805 of Subpart JJ. (9VAC5-60-100, 9VAC5-80-110, 40 CFR 63.805)

Submittals

49. **MACT Subpart JJ - Submittals** - All submittals regarding 40 CFR 63, Subpart JJ to the Administrator shall be sent to EPA Region III and Blue Ridge Regional Office at the following addresses:

U.S. EPA Region III
Air Protection Division (3AP00)
ATTN: Wood Furniture NESHAP Coordinator
1650 Arch Street
Philadelphia, PA 19103-2029

Virginia Department of Environmental Quality
Blue Ridge Regional Office
Attn: Air Compliance Manager
901 Russell Drive
Salem, Virginia 24153

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.13)

Recordkeeping

50. **MACT Subpart JJ - Recordkeeping** - The permittee shall maintain records of the following:
- a. For emission limit purposes, the permittee shall maintain records of the following:
 - i. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in §63.802;
 - ii. The VHAP content, in lb VHAP / lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in §63.802; and
 - iii. The VOC content, in lb VOC / lb solids, as applied, of each strippable booth coating subject to the emission limits in §63.802 (a)(3) or (b)(3).

- iv. The formaldehyde content, in lb / gal, as applied, of each finishing material and contact adhesive subject to the emission limits in §63.802(a)(4) or (b)(4) and chooses to comply with the 400 lb / yr limits on formaldehyde in §63.802(a)(4) (i) or (b)(4) (i).
- b. Following the compliance method in §63.804(a)(1) or (d)(1), the permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1 (as defined in Condition 47).
- c. The permittee following the compliance procedures of §63.804(f)(3)(ii) and (g)(3)(ii) shall maintain the records required by Condition 50a (§63.806(b)) as well as the following:
 - i. Solvent and coating additions to the continuous coater reservoir;
 - ii. Viscosity measurements; and
 - iii. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.
- d. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
 - i. Records demonstrating that the operator training program required by §63.803(b) (Condition 46.b) is in place;
 - ii. Records collected in accordance with the inspection and maintenance plan required by §63.803(c) (Condition 46.c.);
 - iii. Records associated with the cleaning solvent accounting system required by §63.803(d) (Condition 46.d.);
 - iv. Records associated with the formulation assessment plan required by §63.803(l) (Condition 46.l); and
 - v. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- e. The permittee following the compliance method §63.804 (f)(4) or (g)(4) shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the value of E_{ac} required by Equations 2 or 4, records of the operating parameter values, and copies of the semiannual compliance reports required by §63.807(d).

- f. The permittee following the compliance method §63.804 (f)(6) or (g)(6) shall maintain copies of the calculations demonstrating that the overall control efficiency (R) of the control system results in the applicable value of G_{ac} calculated by Equation 3, records of the operating parameter values, and copies of the semiannual compliance reports required by §63.807(d).

$$R = [(G_{bc} - G_{ac}) / G_{bc}] (100)$$

Equation 3

G = the VHAP content of a contact adhesive, in lb VHAP / lb solids, as applied.
ac = after the control system is installed and operated.
bc = before control.

- g. The permittee shall maintain records of the compliance certifications submitted in accordance with §63.807(c) for each semiannual period following the compliance date.
- h. The permittee shall maintain records of all other information submitted with the compliance status report required by §63.9(h) and §63.807(b) and the semiannual reports required by §63.807(c).
- i. The permittee shall maintain all records in accordance with the requirements of §63.10(b)(1).
- j. The permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control equipment and monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with §63.802(c), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.806)

Reporting

51. **MACT Subpart JJ - Reporting** - Reporting not otherwise required by this permit shall consist of the following:
- a. When demonstrating continuous compliance, the permittee shall submit a report required by §63.807 covering the previous 6 months of wood furniture manufacturing operations:

- i. The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.
 - ii. Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.
 - iii. The semiannual reports shall include the information required by Condition 47, a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
 - iv. The frequency of the reports required by paragraph b of this condition shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.
- b. The permittee when demonstrating continuous compliance [when using a control device] shall submit the excess emissions and continuous monitoring system performance report and summary report required by §63.10(e) of Subpart A. If the source experiences excess emissions, the report shall be submitted quarterly for at least 1 year after the excess emissions occur and until a request to reduce reporting frequency is approved. If no excess emissions occur, the report shall be submitted semiannually. All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate.
- c. The permittee, when required to provide a written notification by Condition 46.l.iv. for exceedance of a baseline level [§63.803(l)(4)], shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.807)

Notification of Compliance

52. **MACT Subpart JJ - Notification of Compliance** - Each time a notification of compliance status is required, the permittee shall submit to the appropriate Blue Ridge Regional Office and/or the Administrator a notification of compliance status according to §63.9(h), signed by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with Subpart JJ. The notification shall list:
- a. The methods that were used to determine compliance;

- b. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
- c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
- d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;
- e. An analysis demonstrating whether the facility is a major source or an area source (using the emissions data generated for this notification);
- f. A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
- g. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.
- h. If low-formaldehyde coatings and contact adhesives are being used to comply with the formaldehyde limit, a statement that low-formaldehyde coatings and contact adhesives, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a coating or contact adhesive that is not low-formaldehyde, as demonstrated by records or by a sample of the coating or contact adhesive, is used. Use of a noncompliant coating or contact adhesive is a separate violation for each day the noncompliant coating or contact adhesive is used.

(9VAC5-60-100, 9VAC5-80-110, 40 CFR 63.804(h) and 40 CFR 63.9(h))

Facility Wide Conditions

General Compliance Requirements

53. **Facility Wide Conditions - Maintenance/Operating Procedures** - At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9VAC5-80-110 and Condition 28 of the 6/18/18 Permit Document)

54. **Facility Wide Conditions - Record of Malfunction** - The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown, or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9VAC5-80-110 and Condition 29 of the 6/18/18 Permit Document)

Testing

55. **Facility Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.
(9VAC5-80-110 and Condition 23 of the 6/18/18 Permit Document)

Insignificant Emission Units

56. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
D1	Pneu-Mech natural gas drying oven	9VAC5-80-720C	---	1.0 MMBtu/hr
D2	Production Systems natural gas drying oven	9VAC5-80-720C	---	1.0 MMBtu/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110. (9VAC5-80-110)

Permit Shield & Inapplicable Requirements

57. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None Identified	---	---

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
 (9VAC5-80-110 and 9VAC5-80-140)

General Conditions

58. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9VAC5-80-110)

59. **General Conditions - Permit Expiration**

- a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
- b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- c. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.
- d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
- e. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- f. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

60. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

61. **General Conditions - Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9VAC5-80-110)

62. **General Conditions - Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedances of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring or periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semiannual reporting period."

(9VAC5-80-110)

63. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9VAC5-80-110, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:
R3_APD_Permits@epa.gov

(9VAC5-80-110)

64. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Blue Ridge Regional Office within four daytime business hours after discovery of any deviations

from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semiannual compliance monitoring report pursuant to Condition 62 of this permit. (9VAC5-80-110 F. 2)

65. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office.
(9VAC5-80-110 and 9VAC5-20-180)
66. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9VAC5-80-110)
67. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9VAC5-80-110)
68. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9VAC5-80-110)
69. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC5-80-110, 9VAC5-80-190, and 9VAC5-80-260)

70. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110)
71. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9VAC5-80-110)
72. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.
(9VAC5-80-110)
73. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit was issued under 9VAC5-80-50 through 9VAC5-80-300 shall pay annual emissions fees, as applicable, consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 and annual maintenance fees, as applicable, consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350.
(9VAC5-80-110, 9VAC5-80-310 et seq., and 9VAC5-80-2310 et seq.)
74. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-80-110 and 9VAC5-50-50)

75. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9VAC5-80-110 and 9VAC5-50-20 E)

76. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.
(9VAC5-80-110)

77. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110)

78. **General Conditions - Reopening for Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

79. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9VAC5-80-110 and 9VAC5-80-150)

80. **General Conditions - Transfer of Permits**

- a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-110 and 9VAC5-80-160)

81. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9VAC5-80-110, 9VAC5-80-190 C, and 9VAC5-80-260)
82. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9VAC5-80-110 and 9VAC5-80-80 E)
83. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(9VAC5-80-110 and 40 CFR Part 82)
84. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9VAC5-60-70 and 9VAC5-80-110)
85. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(9VAC5-80-110 and 40 CFR Part 68)
86. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9VAC5-80-110)
87. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to

the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110)

Attachment A -- Compliance Assurance Monitoring Plan

Norcraft Companies
Lynchburg, VA
COMPLIANCE ASSURANCE MONITORING PLAN
(Revision Date: August 12, 2014)
Registration No. 30845

I. Background

A. Emission Unit

Description	Dust #1, Dust #2 and Dust #3, Component Processing
Identification	BH1, BH2 and BH3
Facility	Lynchburg Plant Lynchburg, VA

B. Applicable Regulations, Emission Limits, and pre CAM Monitoring Requirements

Regulation	9VAC5-50-260
CAM Emission Limits	PM-10: 0.01 gr/dscf, PM-2.5: 0.01 gr/dscf (BH3 only)
Pre CAM Monitoring Requirements	Visible emissions from exhaust stack Shall not exceed 5% Opacity as determined by EPA Method 9.

C. Control Technology, Capture System, Bypass, PTE

Controls	BH1 – RF Filter, pulse air bag cleaning baghouse; BH2 – RF Filter, pulse air bag cleaning baghouse; BH3 – RF Filter, pulse air bag cleaning baghouse.
Capture System	Closed duct system.
Bypass	None
PTE Before Controls	BH1 – > 100 TPY (Based on 99% efficiency) BH2 – > 100 TPY (Based on 99% efficiency) BH3 – > 100 TPY (Based on 99% efficiency)
PTE After Controls	BH1 – 7.5 TPY BH2 – 7.1 TPY BH3 – 10.8 TPY

II. Monitoring Approach

A. Indicators

- a. Visible emissions will be used as an indicator. Normal process operations will not produce conditions that adversely affect the baghouse, so no process operational parameters will be monitored.
- b. Annual inspection and maintenance of BH1, BH2 and BH3.

B. Measurement Approach

- a. Visible emissions from exhaust will be monitored daily using EPA Method 22. A one minute observation will be performed and the results recorded in a logbook by the observer.
- b. Results of the annual inspection and maintenance of BH1, BH2 and BH3 shall be documented and retained on-site.

C. Indicator Range

- a. An excursion is defined as the presence of visible emissions.

D. Performance Criteria

Data Representation	Measurements are being made at the point of emission (baghouse exhaust)
QA/QC Practice and Criteria	The observer will be familiar with Reference Method 22 – like procedures.

III. Response to Excursion

- A. Upon noting visible emissions, the observer will immediately notify maintenance to inspect the baghouse, and operations to slow down production as feasible. Maintenance personnel will inspect the baghouse within 4 hours of receiving notification and make needed repairs as soon as practicable. Operations will return to normal upon completed correction action.
- B. QIP Threshold: Five excursions in a 6 month reporting period. (Note: Proposing a QIP threshold in CAM submittal is not required.)

JUSTIFICATION

Background

The pollution specific units are “Dust #1, Component Processing, BH1”, “Dust #2, Component Processing, BH2”, and “Dust #3, Component Processing, BH3” that collect sawdust from a variety of wood processing equipment that produces component parts to predetermined specifications. BH1 is controlled by a DONALDSON COMPANY RF Filter baghouse unit with 156 bags that filters approximately 20,000 CFM of air. BH2 is controlled by a PNEUNAFIL RF Filter baghouse unit with 316 bags that filter approximately 19,000 CFM of air. BH3 is controlled by a DONALDSON COMPANY RF Filter baghouse unit with 484 bags that filters approximately 28,842 CFM of air. All the wood processing equipment has a closed-vent system to the baghouse. There is no means for the baghouse to be bypassed.

Rationale for Selection of Performance Indicators

Visible emissions were selected as the performance indicator because it is indicative of good operation and maintenance of the baghouse. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Any increase in visible emissions indicate reduced performance of a particulate control device; therefore, the presence of visible emissions is used as a performance indicator.

Rational for Selection of Indicator Range

The selected range is NO visible emissions. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of NO visible emissions was selected because: (1) an increase in visible emissions is indicative of an increase in particulate emissions; and (2) a monitoring technique which does not require a METHOD 9 certified observer is desired. Although RM-22 applies to fugitive sources, the visible / NO visible emissions technique of RM-22 can be applied to ducted emissions: i.e., Method 22 – like observations.

The selected QIP threshold for baghouse visible emissions is five excursions in a 6 month reporting period. This level is 3% of the total visible emissions observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented. (Note: Proposing a QIP threshold in the CAM submittal is not required.)